## Hot Topic Lake Cochituate

While visitors enjoyed outdoor activities including fishing, boating, kayaking and swimming at Cochituate State Park this summer, beneath the lake's surface a threat to the lake quietly began to grow. Three non-native invasive aquatic plants, Variable Milfoil (*Myriophyllum heterophyllum*), Eurasian Milfoil (Myriophyllum spicatum), and Curly-leaved Pondweed (Potamogeton crispus) were introduced to the lake and became established. Lake Cochituate is considered a great pond and is comprised of three ponds, North, Middle and South, with waters flowing from south to north. Skiing and tubing are allowed in South Pond only, while kayaks, canoes, small sailboats and windsurfers frequent quiet North Pond (designated a no wake zone on the weekends). The state boat ramp and swimming area are located on Middle Pond. This summer, the Department of Environmental Management's Lakes and Ponds Program staff identified all three non-native species in South Pond and Eurasian Milfoil in Middle Pond. So far, no non-native species have been discovered in North Pond.







The introduction of invasive non-native species into a waterbody poses a very serious threat to the entire ecosystem of the lake or pond. Invasive species rapidly displace native beneficial species thus driving out any animal species, including fish and macroinvertebrates, that depend on the native plants. The dense mats formed by invasive species can impede or entirely prevent boating and fishing, and can be hazardous to swimmers. In addition to the decrease in recreational value, many lakes with infestations of invasive species suffer a decline in aesthetic and property values. Once invasive species are established in a lake or pond, they are nearly impossible to remove, but there are a variety of management options that can be applied to control the infestation.

The Eurasian Milfoil and Variable Milfoil spread primarily via fragmentation, which means that as plants are chopped up by boat props, many of the small pieces (fragments) settle to the lake bottom, and where there is adequate light, grow new plants. Department of Environmental Management staff, with support from user groups, installed netting across the tunnels that separate the three ponds. The nets prevent boat traffic between the three ponds but are intended to stop plant fragments from drifting from one pond to another. Lake and



pond management professionals will be hired to study Lake Cochituate and to develop a lakewide management plan that will focus on protecting the resource while controlling the infestation of non-native invasive species. Educational signs

have been installed to warn boaters about the presence of invasive species in the lake, and brochures are being distributed to inform visitors and abutters about the invasive species issue on Lake Cochituate. Volunteers will be trained by DEM's Weed Watcher Program to monitor the invasive species and to detect any new infestations.

In the mean time, boaters are asked to:

- Check their trailers, anchors, props, fishing gear and dive gear for any plant fragments.
- Dispose of live well, cooling and bait bucket water well away from shore.
- Avoid boating through shallow areas and remain in deeper water. (Boat motors can chop and further spread the plants)